

Industrial Dust Collection System with Cyclone Separators

This industrial dust collection system efficiently removes particulate matter from the air using cyclone separators. Its modular design allows for adaptability to different industrial applications, ensuring compliance with environmental regulations.



ADDITIONAL IMAGES



System Overview

Industrial Dust Collection System

This comprehensive dust removal system is engineered for high-efficiency particulate separation in industrial environments. It integrates dust covers, ventilation ducts, cyclone separators, and fan units into a cohesive network designed to maintain air quality and operational safety. With a focus on optimized airflow and pipeline design, the system minimizes eddy currents and blockage risks, ensuring reliable performance for manufacturing, woodworking, and metalworking applications.

Core Components

Dust Cover, Ventilation Duct, Dust Collector, Centrifugal Fan, Cyclone Separator

Pipeline Design Guidelines

Installation Standards

Parameter	Requirement
Minimum Pipe Diameter	100mm
Vertical/Inclined Angle	Minimum 50°
Horizontal Pipe Support Spacing (<=360mm dia)	Max 4m
Horizontal Pipe Support Spacing (>360mm dia)	Max 3m
Vertical Pipe Support Spacing	Max 4m

Design Best Practices

- Use circular cross-sections to prevent dust accumulation in corners
- Connect branch pipes from the top or side of the trunk
- Install dust collectors before the fan to reduce wear
- Avoid supporting pipes directly on equipment shells
- Do not fix ropes or hangers directly to flanges

Performance Features

System Efficiency Metrics

50 degrees

Min. Inclination Angle

100 mm

Min. Pipe Diameter

Durability & Application

Corrosion Resistant • Modular Design • Scalable • Industrial Grade